

GLOSSARY OF VALIDATION DATA QUALIFIERS

(no code) Confirmed detection/identification.

- U Not detected. The associated number indicates approximate sample concentration necessary to be detected.
- J Analyte present. Reported value may not be accurate or precise.
- B Not detected substantially above the level reported in laboratory or field blanks.
- R Unreliable and unusable result. Analyte may or may not be present in the sample. Value not shown in table.
- N Tentative identification and considered present.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- Q No analytical result.
- UJ Not detected. Quantitation limit may be inaccurate or imprecise.
- UL Not detected. Quantitation limit is probably higher.
- NJ Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.
- D The reported value is from a secondary dilution.
- NR Not run or data not available.

NOTES:

Values shown in bold and highlighted exceed Reference Background or RBCTAP.

Maximum detected reference background for groundwater (ICF Kaiser Engineers, Inc., 1995a.).

USEPA Region III Risk-Based Concentration (RBC) for tap water (April 2002).

Groundwater Reference Background values are half of the detection limit for Antimony, Chromium, Selenium, Silver, and Vanadium.

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria <i>residential</i>	Ecological Screening Criteria	C7-SW-01 22-May-96	C7-SW-02 22-May-96	C7-SW-03 22-May-96	C7-SW-04 22-May-96	C7-SW-05 22-May-96
Inorganics, Total									
Aluminum	µg/L	10,200	370,000	25	164 K	231 K	306 K	306 K	567
Antimony	µg/L	25	150	30	2.3 U	2.3 U	2.3 U	2.5 B	2.3 U
Arsenic	µg/L	3.2	0.45	874	2 U	2.9 K	2.2 K	2.6 K	2 U
Barium	µg/L	179	2,600	10,000	6.6 B	6.5 B	6.4 B	7 B	17.7
Beryllium	µg/L	2.5	730	5.3	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Boron	µg/L		330,000	53,000	40.7	44.2	42.6	45.1	26.2
Calcium	µg/L	83,800			8,570 K	8,570 K	8,720 K	8,970 K	11,300
Chromium	µg/L	14.2	1,100		0.6 U	0.6 U	0.74 B	0.76 B	0.77 B
Cobalt	µg/L	21.1	7,300	35,000	0.6 U	0.72 B	0.6 U	0.6 U	0.6 U
Copper	µg/L	9.7	15,000	6.5	5.4 B	6.2 B	5.8 B	5.9 B	4.4 B
Iron	µg/L	26,700	110,000	320	367	467 U	595	554	7.53
Lead	µg/L	18	150	3.2	1.6 B	2.3 B	2.3 B	2.6 B	6.5 B
Manganese	µg/L	4,810	7,300	14,500	72.5 J	77.1 J	84.9 J	83.1 J	45.9 J
Magnesium	µg/L	229,000			6,580 K	6,790 K	6,800 K	6,960 K	5,480 K
Nickel	µg/L	23.7	7,300	160	2 B	2.4 B	2.5 B	3 B	1.9 B
Potassium	µg/L	73,400			3,550	3,690	3,700	3,780	2,620
Silver	µg/L	2.5	1,800	0.0001	0.7 U	0.88 B	0.7 U	0.7 U	0.7 U
Sodium	µg/L	2,010,000			3,280	34,200	34,300	35,300	22,300
Thallium	µg/L	6.25	26	40	2.1	1.8	1.8 U	1.8 U	2.6
Vanadium	µg/L	23.2	2,600	10,000	1.4	1.8	1.2	2 B	1.4
Zinc	µg/L	78	110,000	30	8.7	8.1 B	8.1 B	9.1 B	25.4
Cyanide	µg/L	10	7,300	5.2	5 B	5 U	5 U	5 U	7.8 B
Phenolics (total recoverable)	µg/L				50 U	50 U	50 U	77	50 U
Phosphorus (total)	µg/L				2,330	478 UJ	108 UJ	476	903 UJ
Pesticides/PCBs									
DDD	µg/L		2.79	0.60	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Heptachlor	µg/L		0.15	0.0038	0.05 U	0.05 U	0.05 U	0.05 U	0.014 B
Phthalates									
Bis(2-ethylhexyl)phthalate	µg/L		48	30	10 U	10 U	10 U	10 U	1 J
Di-n-butyl phthalate	µg/L		37,000	0.3	10 U	10 U	10 U	1 B	10 U
Chlorinated Volatiles									
1,1,2,2-Tetrachloroethane	µg/L		0.527	2,400	10 U	10 U	10 U	10 U	10 U
Chloroform	µg/L		1.5	1,240	10 U	10 U	10 U	10 U	3 J
Methylene Chloride	µg/L		41	11,000	3 B	3 B	4 B	4 B	4 B
Chloromethane	µg/L		21.1		10 U	10 U	10 U	10 U	10 U
Misc Volatiles & Semivolatiles									
Acetone	µg/L		6,100	9,000,000	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	µg/L		10,430	2	10 U	10 U	10 U	10 U	10 U
Radionuclides									
Gross Alpha	pCi/L				2 U	2 U	2 U	2 U	2 U
Gross Beta	pCi/L				3 U	3 U	4±2	3±2	3 U

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

Northern Bush River - Surface Water, Round 1

C7-SW-05	C35-SW-01	C35-SW-02	C35-SW-03	C35-SW-04	C36-SW-01	C36-SW-02	C36-SW-03	C36-SW-04
22-May-96	12-Jan-95	12-Jan-95	12-Jan-95	12-Jan-95	17-Mar-95	17-Mar-95	17-Mar-95	17-Mar-95
Surface Water - Round 1								
567	240	191	359	312	364	408	498	853
2.3 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U
2 U	1.5 U	1.5 U	1.5 UL	1.5 U	1.7 U	1.7 U	1.7 U	1.7 U
17.7	37	25	18.9	12.4	27.5	32.4	27.4	25
0.0003 U	0.00083 U	0.00083 U	0.00083 U	0.00083 U	0.00107 U	0.00107 U	0.00107 U	0.00107 U
26.2	NR	NR	NR	NR	NR	NR	NR	NR
11,300	25,800	26,400	1,910	15,300	29,600	30,200	29,400	2,550
0.77 B	0.00825 U	0.00825 U	0.00825 U	0.00825 U	0.0091 U	0.0091 U	0.0091 U	0.0091 U
0.6 U	0.0137 U	0.0137 U	0.0137 U	0.0137 U	14.4 UL	14.4 UL	14.4 UL	14.4 UL
4.4 B	0.0158 U	0.0158 U	0.0158 U	0.0158 U	11.9 UL	11.9 UL	11.9 UL	11.9 UL
7.53	1,300	517	736	618 U	889	1,020	1,200	1,690
6.5 B	35.4	15.7 U	3.45	3.79	1.69	0.856	1.69	6.29
45.9 J	686	369	152	198	407	455	505	357
5,480 K	45,100	49,100	35,700	27,800	5,730	54,000	5,280	4,480
1.9 B	0.0295 U	0.0295 U	0.0295 U	0.0295 U	0.0255 U	0.0255 U	0.0255 U	0.0255 U
2,620	1,440	15,800	11,800	11,300	1,830	1,880	1,790	1,550
0.7 U	0.001 U	0.001 U	0.001 U	0.001 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ
22,300	332,000	357,000	283,000	230,000	388	399,000	409,000	348,000
2.6	0.0015 U	0.0015 U	0.0015 U	0.0015 U	2.4 UL	2.4 UL	2.4 UL	2.4 UL
1.4	0.0162 U	0.0162 U	0.0162 U	0.0162 U	14.2 UL	14.2 UJ	14.2 UL	14.2 UL
25.4	25 B	24.9 B	25 B	23.1 B	14.1 B	19.6 B	20.9 B	30.8 B
7.8 B	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
903 UJ	95 UJ	74 UJ	139 UJ	147 UJ	84 J	12 J	30 J	17 J
0.10 U	0.01 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 NJ
0.014 B	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1 J	2 J	10 U	10 U	10 U	10 U	10 U	1 J	10 U
10 U	2 J	1 J	10 U	10 U	10 U	1 B	2 B	10 U
10 U	1 J	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
3 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4 B	2 B	2 B	6 B	7 B	10 U	1 B	10 U	6 B
10 U	10 U	10 U	2 J	10 U	10 U	28 J	10 U	10 U
10 U	19 B	20 B	7 B	119 J	10 U	10 U	10 U	10 U
10 U	10 U	10 U	10 U	10 U	10 U	5 B	10 U	2 B
2 U	3 U	3 U	5±3	2 U	4 U	4 U	4 U	4 U
3 U	11±2	26±2	20±2	15±2	16±3	13±3	16±3	26±3

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria <i>residential</i>	Ecological Screening Criteria	C7-SW-01 28-Aug-96	C7-SW-02 28-Aug-96	C7-SW-03 28-Aug-96	C7-SW-04 28-Aug-96	C7-SW-05 28-Aug-96
Inorganics, Total									
Aluminum	µg/L	10,200	370,000	25	345 K	318 K	605 K	564	1,360
Arsenic	µg/L	3.2	0.45	874	4.1 UL	4.1 UL	4.1 UL	4.1 UL	4.1 UL
Barium	µg/L	179	2,600	10,000	8.2	7.9	8.8	13.4	24.1
Beryllium	µg/L	2.5	730	5.3	0.2 UL	0.2 UL	0.2 L	0.2 UL	0.2 UL
Boron	µg/L		330,000	53,000	58.2 K	59.4 K	56.1 K	63.4 K	31.8 B
Cadmium	µg/L	2.5	180	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Calcium	µg/L	83,800			8,860 K	8,300 K	8,190 K	9,130 K	1,220
Cobalt	µg/L	21.1	7,300	35,000	1.4 UL	1.4 B	1.5 B	2.1 B	1.4 UL
Copper	µg/L	9.7	15,000	6.5	3.9 L	5.1 L	5.3 L	4.8 L	3.7 L
Iron	µg/L	26,700	110,000	320	623	587	1,220	1,040	1,810
Lead	µg/L	18	150	3.2	2.7 L	2.3 UL	2.3 L	5 L	2.3 UL
Manganese	µg/L	4,810	7,300	14,500	162	160	212	350	71.7
Magnesium	µg/L	229,000			10,900	10,100	9,850 K	9,780 K	6,220 K
Mercury	µg/L	0.2	37	0.012	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	µg/L	23.7	7,300	160	12 UL	12 UL	12 UL	12 UL	12 U
Potassium	µg/L	73,400			5,160 L	4,870 L	4,890 L	4,960 L	3,000 L
Selenium	µg/L	6.25	1,800	5	3.4 UL	3.4 UL	3.4 UL	3.4 UL	3.4 U
Silver	µg/L	2.5	1,800	0.0001	2.8 UL	2.8 UL	2.8 UL	2.8 UL	2.8 U
Sodium	µg/L	2,010,000			64,900	59,100	56,400	53,000	29,900
Thallium	µg/L	6.25	26	40	7 U	7 U	7 U	7 U	7 U
Vanadium	µg/L	23.2	2,600	10,000	5.4 L	6 L	5.9 L	6.4 L	4.7 L
Zinc	µg/L	78	110,000	30	6.9 B	7 B	9.3 B	38.5 L	29.5 L
Phosphorus (total)	µg/L				123 UJ	222 U	106 U	616	185
Pesticides/PCBs									
delta-BHC	µg/L				0.012 J	0.009 J	0.01 J	0.005 UJ	0.011 J
Endrin aldehyde	µg/L				0.1 UJ	0.1 U	0.004 J	0.1 UJ	0.1 U
Phthalates									
Bis(2-ethylhexyl)phthalate	µg/L		48	30	10 U	10 U	1 B	10 U	1 J
Di-n-butyl phthalate	µg/L		37,000	0.3	1 J	10 U	10 U	10 U	10 U
Chlorinated Volatiles									
Chloroform	µg/L		1.5	1,240	10 U	10 U	10 U	10 U	6
Methylene Chloride	µg/L		41	11,000	6 B	6 B	6 B	6 B	6
Misc Volatiles & Semivolatiles									
Acetone	µg/L		6,100	9,000,000	7 B	10 U	10 U	6 B	10
Radionuclides									
Gross Alpha	pCi/L				3±1	2 U	2 U	2 U	2
Gross Beta	pCi/L				6±1	3 U	4±1	3 U	3

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

	C7-SW-05	C35-SW-01	C35-SW-02	C35-SW-03	C35-SW-04	C36-SW-01	C36-SW-02	C36-SW-03	C36-SW-04
	Surface Water - Round 2								
	28-Aug-96	15-May-95	15-May-95	15-May-95	15-May-95	12-Jun-95	12-Jun-95	12-Jun-95	20-Jun-95
4	1,360	277 L	296 L	324 L	747	256	898	1,110	100 U
1 UL	4.1 UL	1.8 UL	1.8 UL	1.8 UL	1.8 UL	R	R	6.5 L	1.8 U
4	24.1	21 U	22.7	21 U	22.8	45 K	55.4 K	46.3 K	23 U
2 UL	0.2 UL	0.0011 U	0.0011 U	0.0011 U	0.0011 U	1.1 U	1.1	1.1 U	1.1 UL
4 K	31.8 B	NR	NR	NR	NR	NR	NR	NR	NR
5 U	0.5 U	3 UL	3 UL	3 UL	3 UL	3 U	3 U	3.3	4 U
0 K	1,220	26,100	25,900	26,400	26,400	2,670 J	2,680 J	2,660 J	2,450
1 B	1.4 UL	0.013 U	0.013 U	0.013 U	0.013 U	13 UL	13 UL	13 UL	14 U
8 L	3.7 L	0.023 U	0.023 U	0.023 U	0.023 U	23 UL	23 UL	23 UL	23 UL
0	1,810	46	801	725	1,410	608	1,790	2,210	383 L
5 L	2.3 UL	6.7 U	2.7 U	1.1	5.2	R	2.5 L	2.5 L	0.9 UL
0	71.7	113	86.2	76.2	122	424 J	493 J	333 J	335
0 K	6,220 K	47,100	48,400	49,800	48,400	8,990 J	7,130 J	6,310 J	5,940
1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.4	0.1 U	0.1 U	0.11	0.1 U
2 UL	12 UL	21 UL	21	21 UL	21 UL	21 UL	21 UL	21 UL	21 U
0 L	3,000 L	14,600	15,100	15,200	15,300	21,800	20,900	20,000	20,300
4 UL	3.4 UL	1.6 UL	1.6 UL	2.3 B	2.1 B	R	R	R	2.6 B
8 UL	2.8 UL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	R	R	R	1.2 B
0	29,900	347,000	353,000	357,000	359,000	504,000	471,000	485,000	471,000
7 U	7 U	2.8 UL	2.8 UL	2.8 UL	2.8 UL	R	R	R	2.8 U
4 L	4.7 L	29 UL	29 UL	29 UL	29 UL	29 UL	29 UL	29 UL	29 UL
5 L	29.5 L	20.9 B	26.7 B	24.1 B	38.4 B	46.5 B	32.7 B	22 B	12 U
6	185	9,000 UJ	9,940 UJ	2,660 UJ	4,400 UJ	478 UJ	212 UJ	712 UJ	124 J
5 UJ	0.011 J	0.05 U	0.05 U	0.05 U	0.05 UL	0.05 U	0.05 UL	0.05 UL	0.05 UL
1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UL	0.1 U	0.1 UL	0.1 U	0.1 UL
0 U	1 B	2 J	1 UL	1 J	10 UL	10 U	1 J	10 U	10 U
0 U	10 U	10 U	10 UL	10 U	10 UL	2 J	1 J	10 U	10 U
10 U	6 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
6 B	6 B	3 B	2 B	2 B	11 B	1 B	4 B	3 B	2 B
6 B	10 U	8 B	15 B	10 U	10 U	6 B	5 B	4 B	10 U
2 U	2 U	3 U	3 U	3 U	2 U	10±5	4 U	4 U	4 U
3 U	3 U	12±3	9±2	9±2	20±2	15±4	9±4	9±4	13±3

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria <i>residential</i>	Ecological Screening Criteria	C7-SD-01 12-Jun-96	C7-SD-02 11-Jun-96	C7-SD-03 10-Jun-96	C7-SD-04 10-Jun-96	C7-SD-05 10-Jun-96
Inorganics, Total									
Aluminum	mg/kg	28,050	780,000		2,540	3,550 J	464 J	10,900 J	7,640 J
Antimony	mg/kg	1.8	310	150	0.56 B	2.1 B	0.29 UL	0.73 UL	0.73 UL
Arsenic	mg/kg	18.9	4.3	8.2	1.3 K	1.1	0.69	5.5 J	3.6 J
Barium	mg/kg	130	55,000		5.8 B	16.1 K	2.2 J	46.5 J	35.7 J
Beryllium	mg/kg	2.59	1,600		0.2 B	0.5 B	0.04	0.64 J	0.56 J
Cadmium	mg/kg	3.42	390	1.2	0.1 U	0.13 U	0.05 U	0.13 UJ	0.13 UJ
Calcium	mg/kg	9,590			154 B	1,410 K	52 B	2,090 K	2,130 K
Chromium	mg/kg	117	2,300	0.005	5.3	8.1 J	2.6 J	20.8 J	14.1 J
Cobalt	mg/kg	35.1	16,000		3 B	4.1 B	0.38 J	9.3 J	7.4 J
Copper	mg/kg	78.7	31,000	34	4.7 B	6.6	0.87 B	18 J	13.9 J
Iron	mg/kg	54,300	230,000		3,120	10,500 J	1,300 J	16,200 J	13,200 J
Lead	mg/kg	91.1	4,000	46.7	5.6	6.8 K	2 B	24.9 J	41.9 J
Manganese	mg/kg	1,590	16,000		17.9	122 K	79.4 L	142 L	157 L
Magnesium	mg/kg	6,510			298 K	1,420 K	46 K	2,290 K	1,530 K
Mercury	mg/kg	0.398	78	0.15	0.05 U	0.08 U	0.05 U	0.13 UJ	0.13 UJ
Nickel	mg/kg	70.1	16,000	20.9	4	5.4 K	0.31 B	16.9 J	13.1 J
Potassium	mg/kg	3,730			167	431 J	53.8 J	981 J	565 J
Selenium	mg/kg	1.54	3,900		0.44 U	0.59 UL	0.22 UL	1.7 L	0.57 UL
Silver	mg/kg	0.875	3,900	1	0.17 U	0.56 B	0.09 U	1.7 J	0.22 UJ
Sodium	mg/kg	6,310			49.4	401 L	40.7 B	807 J	187 B
Thallium	mg/kg	0.52	55		0.44 U	0.59 U	0.22 U	0.57 UJ	0.57 UJ
Vanadium	mg/kg	93	5,500		7.6	11.5 K	3.2 J	29.5 J	21.6 J
Zinc	mg/kg	284	230,000	150	20.3	23.8 J	2.2 B	166 J	219 J
Phenolics (total recoverable)	mg/kg				3.03 U	3.98 U	3.04 U	7.14 U	7.91 U
Phosphorus (total)	mg/kg				0	15	12,100	38,400	46,900
Pesticides/PCBs									
delta-BHC	µg/kg				2.1 U	2.8 U	2.1 U	5.3 UJ	5.4 UJ
DDD	µg/kg	8.3	27,000	16	4.1 U	3.4 J	4.1 U	160 J	80 J
DDE	µg/kg	11	19,000	2.2	4.1 U	2.1 J	4.1 U	44 J	32 J
DDT	µg/kg	15.4	19,000	1.58	4.1 U	5.4 U	4.1 U	11 UJ	11 J
Heptachlor	µg/kg	3.14	14,000		2.1 U	2.8 U	2.1 U	5.3 UJ	5.4 UJ
Phthalates									
Bis(2-ethylhexyl)phthalate	µg/kg	93,000	456,000	1,300	410 U	550 UJ	410 U	1,000 UJ	240 J
PAHs									
Benzo(a)pyrene	µg/kg	250	870	430	410 U	550 UJ	410 U	1,000 UJ	1,000 UJ
Benzo(k)fluoranthene	µg/kg	140	87,000		410 U	550 UJ	410 U	1,000 UJ	1,000 UJ
Aromatics									
Toluene	µg/kg		160,000,000		3 JB	2 J	12 U	32 UJ	32 UJ
Chlorinated Volatiles									
Methylene Chloride	µg/kg		850,000		29 B	13 B	8 B	20 B	16 B
Misc Volatiles & Semivolatiles									
Acetone	µg/kg		78,000,000		12 U	31 B	25 B	46 B	220 B
2-Butanone (MEK)	µg/kg		470,000,000		12 U	16 U	12 U	32 U	18 J
4-Methyl-2-pentanone (MIBK)	µg/kg	91	63,000,000	670	9 B	16 U	12 U	4 J	32 UJ
Carbon Disulfide	µg/kg		78,000,000		1 J	16 U	12 U	83 J	4 J
Radionuclides									
Gross Alpha	pCi/g	12.7			0.6±0.3	0.5±0.2	0.5±0.3	0.3±0.1 J	0.3 UJ
Gross Beta	pCi/g	15			0.2 U	0.2 U	0.9±0.4	0.7±0.2 J	0.6±0.2 J
Potassium-40	pCi/g		0.72		44.8±6.67	4.48±1.55	NR	10.1±1.6 J	3.55±1.69 J
Uranium-238	pCi/g		4.48		NR	0.78±0.44	NR	NR	1±0.91 J
Thorium-234	pCi/g		27.32		NR	0.52±0.35	NR	NR	1.73±0.91 J
Radium-226	pCi/g		0.07		NR	1.08±0.98	NR	NR	NR
Bismuth-214	pCi/g		0.08		NR	NR	NR	0.56±0.31 J	NR
Thorium-232	pCi/g		33.67		NR	NR	NR	0.31±0.21 J	0.35±0.3 J
Radium-228	pCi/g		0.12		NR	NR	NR	0.26±0.25 J	0.37±0.36 J
Actinium-228	pCi/g		0.13		NR	0.5±0.33	NR	0.32±0.21 J	0.36±0.3 J
Radium-224	pCi/g		8.26		NR	0.88±0.8	NR	NR	NR
Lead-212	pCi/g		1.13		0.25±0.15	0.35±0.1	0.06±0.05	0.16±0.09 J	0.26±0.12 J
Bismuth-212	pCi/g		0.65		1.41±0.67	0.54±0.25	0.36±0.18	NR	NR
Thallium-208	pCi/g		0.03		0.17±0.1	0.39±0.33	NR	NR	NR
Bismuth-211	pCi/g				0.82±0.68	0.45±0.34	0.24±0.21	NR	0.91±0.45
Iodine-129	pCi/g				0.18±0.16	NR	NR	NR	NR

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

Northern Bush River - Sediment

C7-SD-04	C7-SD-05	C35-SD-01	C35-SD-02	C35-SD-03	C35-SD-04	C36-SD-01	C36-SD-02	C36-SD-03	C36-SD-04
Jun-96	10-Jun-96	15-May-95	15-May-95	15-May-95	15-May-95	12-Jun-95	12-Jun-95	12-Jun-95	20-Jun-95
900 J	7,640 J	9,230 J	3,440	5,710 J	3,150	15,800	16,100 J	5,460	15,600 J
0.73 UL	0.73 UL	R	R	R	0.25 L	0.33 UL	0.51 UL	0.21 UL	0.44 UJ
5.5 J	3.6 J	3.6 J	1.9	2 J	1.5	3.8 J	2.7 B	2.5 J	3.4 J
46.5 J	35.7 J	28.2 J	10.4	25.6 J	8.2	34.7	71.7 J	19.6	35 J
0.64 J	0.56 J	1.6 J	0.17	0.53 J	0.21	1.3	0.93 J	0.31	0.89 J
0.13 UJ	0.13 UJ	1 J	0.49 U	1.2 UJ	0.48 U	1.1 K	0.9 UJ	0.76 K	1 UJ
0.090 K	2,130 K	861 J	191	1,950 J	128	923 J	1,780 J	161 J	1,760 J
20.8 J	14.1 J	15.8 J	5.8	8.9 J	5.1	26.4	20.6 J	13.6	25.5 J
9.3 J	7.4 J	17.7 J	1.7	4.3 UJ	9.6	12.6 B	19.2 B	3 B	10.2 B
18 J	13.9 J	14.7 J	3.6	7.5 J	2.8 U	13.4 L	6.9 UL	10.4 L	9.7 L
2,200 J	13,200 J	10,100 J	5,380	10,200 J	3,940	24,000 J	18,400 J	15,600 J	24,700 J
24.9 J	41.9 J	41.2 J	28.2	10 J	5.7	7.4	7 J	4.5	8.8 J
142 L	157 L	68.1 J	21.8	113 J	16.8	92.7 J	222 J	25.6 J	293 J
2,290 K	1,530 K	1,180 J	509	1,740 J	352	2,440 J	2,920 J	1,070 J	3,590 J
0.13 UJ	0.13 UJ	0.11 J	0.05 U	0.15 J	0.05	0.09 U	0.15 J	0.06 U	0.18 J
16.9 J	13.1 J	18.5 L	2.7 L	6.6 L	2.5 UL	17.6	13.4 L	3.7 L	16.1 L
981 J	565 J	617 J	267	489 J	192	1380	924 J	526	1420 J
1.7 L	0.57 UL	0.67 B	0.19 U	1.1 B	0.32 B	0.31 UJ	0.49 J	0.2 UJ	0.41 UJ
1.7 J	0.22 UJ	0.16 UJ	0.09 U	0.21 UJ	0.08 U	0.17 K	0.36 B	0.09 U	0.26 B
807 J	187 B	478 J	175	587 J	84.6 L	930	931 J	212	1170 J
0.57 UJ	0.57 UJ	0.65 UJ	0.34 U	0.85 UJ	0.33 U	0.55 U	0.84 UJ	0.35 U	0.72 UJ
29.5 J	21.6 J	24.3 J	10.7	22 J	6.9	40.9	33.4 J	27.5	26.7 J
166 J	219 J	36 J	14.4	23.1 B	8.8 B	39.1	49.2 J	23.7	53.6 J
7.14 U	7.91 U	5.39 UJ	2.37 U	5.98 UJ	1.36 U	13.6	17.2 UJ	5.46 U	10.6 UJ
8,400	46,900	617 J	192	497 J	410	150	189 U	75	12,300 J
5.3 UJ	5.4 UJ	3.97 UJ	2.07 U	5.17 UL	2.03 UJ	3.26 U	5.15 UJ	0.61 J	4.35 UJ
160 J	80 J	R	268 NJ	R	R	0.91 J	3.1 J	0.72 J	9.5 J
44 J	32 J	R	144 NJ	R	R	0.66 J	3.2 J	0.56 J	9.4 J
11 UJ	11 J	7.71 UJ	20 J	10 UL	3.95 UJ	0.83 J	10 UJ	4.07 U	8.45 UJ
5.3 UJ	5.4 UJ	3.97 UJ	2.07 U	5.17 UL	2.03 UJ	3.26 U	1.4 J	2.1 U	4.35 UJ
1,000 UJ	240 J	767 UJ	402 U	1,000 UJ	393 U	150 B	970 UJ	407 U	846 UJ
1,000 UJ	1,000 UJ	98 J	402 U	230 J	393 U	180 J	970 UJ	407 U	846 UJ
1,000 UJ	1,000 UJ	767 UJ	402 U	1,000 UJ	393 U	647 U	970 UJ	407 U	88 J
32 UJ	32 UJ	23.3 UJ	12.2 U	30.3 UJ	11.9 U	6 B	29.4 UJ	3 J	25.6 UJ
20 B	16 B	5 J	2 J	31 B	12 B	19.6 U	15 B	7 B	25.6 UJ
46 B	220 B	30 B	11 B	32 J	15 J	140 B	150 J	59 B	25.6 UJ
32 U	18 J	23.3 UJ	12.2 U	30.3 UJ	11.9 U	19.6 U	29.4 UJ	12.4 U	25.6 UJ
4 J	32 UJ	23.3 UJ	12.2 U	30.3 UJ	11.9 U	19.6 U	29.4 UJ	12.4 U	25.6 UJ
83 J	4 J	4 J	12.2 U	30.3 UJ	5 J	13 B	5 J	3 B	25.6 UJ
0.3±0.1 J	0.3 UJ	7.4±3.4 J	6.3±3.1	2.6±1.4 J	3.7 U	5±2.9	7.3±4.1 J	7.9±5.3	0.4±0.1 J
0.7±0.2 J	0.6±0.2 J	13.2±2.9 J	13±2.5	5.6±1.2 J	19.9±4.3	2.9±2.2	12.5±3.3 J	3.9 U	0.2±0.1 J
0.1±1.6 J	3.55±1.69 J	NR	NR	NR	NR	NR	NR	NR	NR
NR	1±0.91 J	NR	NR	NR	NR	NR	NR	NR	NR
NR	1.73±0.91 J	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
56±0.31 J	NR	NR	NR	NR	NR	NR	NR	NR	NR
31±0.21 J	0.35±0.3 J	NR	NR	NR	NR	NR	NR	NR	NR
26±0.25 J	0.37±0.36 J	NR	NR	NR	NR	NR	NR	NR	NR
32±0.21 J	0.36±0.3 J	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.16±0.09 J	0.26±0.12 J	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	0.91±0.45	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

GLOSSARY OF VALIDATION DATA QUALIFIERS

(no code) Confirmed detection/identification.

- U Not detected. The associated number indicates approximate sample concentration necessary to be detected.
- J Analyte present. Reported value may not be accurate or precise.
- B Not detected substantially above the level reported in laboratory or field blanks.
- R Unreliable and unusable result. Analyte may or may not be present in the sample. Value not shown in table.
- N Tentative identification and considered present.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- Q No analytical result.
- UJ Not detected. Quantitation limit may be inaccurate or imprecise.
- UL Not detected. Quantitation limit is probably higher.
- NJ Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.
- D The reported value is from a secondary dilution.
- NR Not run or data not available.

NOTES:

Values shown in bold and highlighted exceed Reference Background, Human Health, or Ecological Screening criteria (USEPA Region III, 1997).

Maximum detected reference background for surface water or sediment (ICF Kaiser Engineers, Inc., 1995b).

USEPA Region III Risk-Based Concentration (RBC) for tap water and residential soil adjusted upward by a factor of 10 for recreational exposures.

Surface Water Reference Background values are half of the detection limit for Antimony, Cadmium, Mercury, Selenium, Silver, and Thallium.

Sediment Reference Background values are half of the detection limit for Silver.

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria	Ecological Screening Criteria	C7-SS-04	C7-SS-05	C7-SS-06	C7-SS-07	C7-SS-14	C7-SS-15
			Residential		11-Jun-96	10-Jun-96	10-Jun-96	10-Jun-96	11-Jun-96	11-Jun-96
Inorganics, Total										
Aluminum	mg/kg	17,300	78,000	1	16,100 J	10,600 J	6,840 J	6,650 J	6,970 J	10,300 J
Antimony	mg/kg	4.9	31	0.48	3.5 B	0.27 UL	0.26 UL	0.33 UL	2.3 B	2.5 B
Arsenic	mg/kg	5.29	0.43	328	4.1 J	4.2	2.5	2.8	2.1	2.4
Barium	mg/kg	125	5,500	440	88.9 K	29.5 J	16.2 J	63.2 J	29.6 K	34.1 K
Beryllium	mg/kg	1.42	160	0.02	1.3 B	0.38	0.18	0.21	0.36 B	0.34 B
Cadmium	mg/kg	1.4	39	2.5	0.69 B	0.05 U	0.04 U	0.68	0.28 B	0.1 U
Calcium	mg/kg	1,980			3,630 K	110 B	53.4 B	5,300 J	1,740 K	243 B
Chromium	mg/kg	68.9	230	0.0075	28.5 J	16 J	10 J	12.8 J	13.3 J	12.4 J
Cobalt	mg/kg	25.6	1,600	100	13.1 K	3.4 J	1.7 J	3 J	4.1 B	3.2 B
Copper	mg/kg	27.5	3,100	15	26.7 J	8.6 J	4.3 J	17.1 J	8.9	5.3
Iron	mg/kg	23,500	23,000	12	17,500 J	14,400 J	7,720 J	9,190 J	9,540 J	9,930 J
Lead	mg/kg	117	400	0.01	65.5 K	10.8 J	8.7 J	49.1 J	16.1 K	13.2 K
Manganese	mg/kg	1,140	1,600	330	265 K	63.1 L	22.1 L	98.8 L	186 K	42.9 K
Magnesium	mg/kg	3,920			3,740 K	1,340 K	518 K	1,160 K	1,750 K	801 K
Mercury	mg/kg	0.07	7.8	0.058	0.17 UJ	0.05 U	0.05 U	0.06 U	0.06 U	0.05 U
Nickel	mg/kg	24.1	1,600	2	25.1 K	7.7 J	3.8 J	9.2 J	11.1 K	5.6 K
Potassium	mg/kg	1,700			999 J	521 J	324 J	353 J	436 J	452 J
Selenium	mg/kg	0.497	390	1.8	1.4 B	0.21 UL	0.2 UL	0.48 L	0.73 B	0.86 B
Silver	mg/kg	0.492	390	0.0000098	0.94 B	0.08 U	0.08 U	0.1 U	0.51 B	0.55 B
Sodium	mg/kg	937			650 B	47 B	42.4 B	173 B	170 B	126 B
Thallium	mg/kg	0.245	5.5	0.001	1.4 UJ	0.23 B	0.42 B	0.82 B	0.51 U	0.43 U
Vanadium	mg/kg	59.2	550	5	52.1 K	26.3 J	15.4 J	16.8 J	21.4 K	21.3 K
Zinc	mg/kg	242	23,000	10	221 J	26.9 J	13.4 J	622 J	104.0 J	25.5 J
Phenolics (total recoverable)	mg/kg				9.21 UJ	2.58 U	11	3.23	3.45 U	2.97 U
Phosphorus (total)	mg/kg				36.3 J	163,000	47,400	19,800	10.4	11.2
Pesticides/PCBs										
Aldrin	µg/kg		38	100	6.7 UJ	1.7 U	1.9 U	2.5 U	2.4 U	2 U
alpha-Chlordane	µg/kg		1,800	100	6.7 UJ	1.7 U	1.9 U	2.5 U	2.4 U	2 U
gamma-Chlordane	µg/kg		1,800	100	6.7 UJ	1.7 U	1.9 U	2.5 U	2.4 U	2 U
DDD	µg/kg	7.83	2,700	100	280 J	3.3 U	3.7 U	6.2	10	38
DDE	µg/kg	392	1,900	100	260 J	4.3 J	11	8	35	53
DDT	µg/kg	143	1,900	100	27 J	3.7 J	28	3 J	19	99
Dieldrin	µg/kg		40	100	13 UJ	3.3 U	3.7 U	4.8 U	4.6 U	3.9 U
Heptachlor	µg/kg		140		6.7 UJ	1.7 U	1.9 U	2.5 U	2.4 U	2 U
Heptachlor epoxide	µg/kg		70	100	6.7 UJ	0.19 J	1.9 U	2.5 U	2.4 U	2 U
Lindane (gamma BHC)	µg/kg		490	100	6.7 UJ	1.7 U	1.9 U	2.5 U	2.4 U	2 U
Phthalates										
Bis(2-ethylhexyl)phthalate	µg/kg		46,000		1,200 UJ	380 U	370 U	58 J	79 J	97 J
Di-n-butyl phthalate	µg/kg		7,800,000		1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Di-n-octyl phthalate	µg/kg		1,564		1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
PAHs										
Benzo(a)anthracene	µg/kg	230	870	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Benzo(a)pyrene	µg/kg	440	87	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Benzo(g,h,i)perylene	µg/kg	200		100	1,200 UJ	380 U	370 U	480 U	50 J	400 UJ
Chrysene	µg/kg	380	87,000	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Fluoranthene	µg/kg	320	3,100,000	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Indeno(1,2,3-c,d)pyrene	µg/kg	210	870	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Phenanthrene	µg/kg	170		100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Pyrene	µg/kg	620	2,300,000	100	1,200 UJ	380 U	370 U	480 U	470 UJ	400 UJ
Aromatics										
Toluene	µg/kg		16,000,000	100	6 J	1 J	3 J	14 U	2 J	3 J
Chlorinated Volatiles										
Tetrachloroethylene	µg/kg		12,000	300	38 UJ	1 J	11 U	14 U	14 U	12 U
Trichloroethylene	µg/kg		1,600	300	26 J	12 U	11 U	14 U	14 U	12 U
Chloroform	µg/kg		780,000	300	38 UJ	12 U	11 U	14 U	14 U	12 U
Methylene Chloride	µg/kg		85,000	300	28 B	9 B	10 B	7 B	11 B	13 B
Chloroethane	µg/kg		49,000		38 UJ	12 U	2 J	14 U	14 U	12 U
Chemical Warfare Related										
n,n-bis(2,4,6-trichlorophenyl)urea	µg/kg				1,000 UJ	NR	NR	NR	NR	2,500 J
Misc Volatiles & Semivolatiles										
Acetone	µg/kg		7,800,000		210 B	28 B	42 B	14 U	49 B	66 B
Radionuclides										
Gross Alpha	pCi/g	9.1			0.4±0.2 J	0.6±0.2	0.3±0.1	0.7±0.2	0.3±0.2	0
Gross Beta	pCi/g	5.8			0.4±0.3 J	0.7±0.2	0.5±0.2	0.7±0.2	0	0
Cesium-137	pCi/g	0.729			0.43±0.08 J	0.08±0.05	0.11±0.07	NR	0.14±0.08	0.09±0.04
Potassium-40	pCi/g	9.36			45.9±8.35 J	6.35±1.69	15.6±2.52	2.81±1.06	6.15±1.7	43.1±7.89
Thorium-234	pCi/g				NR	1.1±0.42	0.92±0.4	NR	NR	NR
Radium-226	pCi/g	1.48			NR	1.91±1.03	1.49±1.22	0.99±0.81	NR	NR
Lead-214	pCi/g	1.54			NR	0.52±0.23	0.44±0.27	0.29±0.19	0.51±0.34	0.65±0.32
Bismuth-214	pCi/g	1.48			NR	0.54±0.5	0.95±0.43	NR	NR	NR
Lead-210	pCi/g				NR	NR	NR	NR	NR	NR
Thorium-232	pCi/g	1.36			NR	0.83±0.46	0.95±0.57	NR	NR	0.59±0.37
Radium-228	pCi/g	1.36			NR	0.55±0.39	0.66±0.39	NR	NR	0.52±0.45
Actinium-228	pCi/g	1.36			0.42±0.32 J	0.85±0.48	NR	NR	0.89±0.61	0.6±0.38
Thorium-228	pCi/g				NR	1.96±0.99	1.88±0.91	1.58±0.64	3.69±1.39	NR
Radium-224	pCi/g				0.25±0.13 J	0.76±0.19	0.66±0.22	0.37±0.12	1.45±0.46	0.77±0.23
Lead-212	pCi/g				NR	0.77±0.37	0.61±0.4	NR	NR	0.64±0.61
Bismuth-212	pCi/g				0.11±0.07 J	0.56±0.39	0.2±0.11	0.12±0.06	0.15±0.09	0.21±0.09
Thallium-208	pCi/g				0.52±0.44 J	1.25±0.51	1.38±0.72	0.72±0.4	1.61±0.81	1.22±0.58
Bismuth-211	pCi/g				NR	1.12±0.52	NR	NR	NR	NR
Cadmium-109	pCi/g				NR	0.32±0.15	0.21±0.13	NR	NR	NR
Neptunium-237	pCi/g				NR	NR	9.74±508	NR	NR	NR
Zirconium-89	pCi/g				NR	NR	NR	NR	NR	NR
NOTES:										
Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.										

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

Northern Bush River - Surface Soil

C7-SS-14	C7-SS-15	C7-SS-16	C36-SS-01	C36-SS-02	C36-SS-03	C36-SS-04	C36-SS-05	C36-SS-06	C36-SS-07	C36-SS-08	C36-SS-12
Jun-96	11-Jun-96	11-Jun-96	16-Jun-95	12-Jun-95	12-Jun-95	12-Jun-95	12-Jun-95	13-Jun-95	13-Jun-95	13-Jun-95	13-Jun-95
6,970 J	10,300 J	13,000 J	8,880 J	7,030	4,460	7,100	8,700	18,100	9,990	5,450	8,290
2.3 B	2.5 B	1.9 B	0.47 L	0.43 L	0.22 UL	0.24 UL	0.23 UL	0.21 UL	0.2 UL	0.21 UL	0.29 UL
2.1	2.4	3.9	5 J	3.8 J	2 J	32.5 J	2.6 J	2.7 K	2.2 B	2.2 B	5.5 K
29.6 K	34.1 K	42.1 K	51.8 J	55.5	30.2	94.1	38.7	239	34.8	29.1	53.6
0.36 B	0.34 B	0.4 B	1.7 J	0.54	0.38	0.45	0.77	1.1	0.21	0.14	0.61
0.28 B	0.1 U	0.1 U	1.9 K	1.1 K	0.69 K	1.1 K	0.77 K	0.79	0.63	0.41	1.3
1,740 J	243 B	490 K	1,820 J	1,360 J	1,070 J	9,330 J	849 J	51,900	93	194	1,010
13.3 J	12.4 J	17.3 J	31 J	11.3	11.3	10.3	10.9	18.1	13.2	6.8	21.2
4.1 B	3.2 B	3.5 B	27.6 K	20.6 K	8.1 B	7.5 B	19.9 K	4.9 B	3.5 B	2.9 B	10.9 B
8.9	5.3	13.9	43.2 J	6.2 L	8.2 L	5.2 L	3.9 L	4.3 L	3.2 L	2.9 UL	43.4
9,540 J	9,930 J	13,700 J	15,900 J	17,100 J	8,000 J	11,600 U	11,900 J	11,700	13,300	7,980	14,500
16.1 K	13.2 K	15.7 K	96.3 J	18.6	21.5	18.5	16.5	44.2	13.9	12.6	75.1
186 K	42.9 K	64.9 K	204 J	382 J	147 J	593 J	280 J	2,460	45	24	190
1,750 K	801 K	1,120 K	1,660 J	1,040 J	2,230 J	3,260 J	716 J	13,800	591	580	3,240
0.06 U	0.05 U	0.06	0.32 J	0.11	0.05	0.09	0.1	0.06 U	0.08 B	0.06 B	0.14 B
11.1 K	5.6 K	6.9 K	30.2 J	11.4 L	29.5	6.4 L	8.6 L	11.5 L	5 L	4 L	32
436 J	452 J	570 J	907 J	278	187	425	265	1040	257 L	157 L	373 L
0.73 B	0.86 B	0.44 UL	0.52 J	0.48 J	0.21 UJ	0.62 J	0.22 J	0.31	0.19 U	0.3	0.9
0.51 B	0.55 B	0.17 U	0.27 B	0.11 B	0.24 B	0.19 B	0.1 U	0.09 UL	0.08 UL	0.09 UL	1.4 L
170 B	126 B	29 B	215 J	42.8	130	312	23.1 U	383	20 UL	21.8 L	317
0.51 U	0.43 U	0.44 U	0.6 UJ	0.4 U	0.36 U	0.4 U	0.38 U	0.35 U	0.33 U	0.35 U	0.48 U
21.4 K	21.3 K	29.7 J	31.4 J	24.2	18	37.6	25.5	77.5	22.7	14.9	55.6
104.0 J	25.5 J	29.4 J	238 J	69.4	46.7	51.1	69.4	31.2	24.2	16.6	121
3.45 U	2.97 U	2.91 U	7.48 UJ	8.87 U	9.15	5.84 U	5.01 U	6.01 U	4.67 U		
10.4	11.2	9.19	1,870 J	122	174	74	132	3,370	87	1,380	1,560
2.4 U	2 U	2.1 U	3.62 UL	2.39 U	1.2 J	2.43 U	2.3 U	2.07 U	2 U	2.1 U	2.87 U
2.4 U	2 U	2.1 U	3.62 UL	2.39 U	7.5	2.43 U	2.3 U	0.38 J	2 U	2.1 U	34
2.4 U	2 U	2.1 U	3.62 UL	2.39 U	5.8	2.43 U	2.3 U	0.28 J	2 U	2.1 U	40
10	38	72	12 L	45	140 NJ	730 NJ	3.5 J	6.3	13.7	4.07 U	546
35	53	100	13 L	150 NJ	110 NJ	1000 NJ	37	30	20	25.1	216
19	99	240	1.4 L	23	23	86 J	9.1	6.6 J	3.88 U	27.7 J	30 J
4.6 U	3.9 U	4.1 U	7.02 UL	4.65 U	26	4.71 U	4.46 U	4.02 U	3.88 U	4.07 U	5.58 U
2.4 U	2 U	2.1 U	3.62 UL	0.65 J	2.18 U	2.43 U	2.3 U	2.07 U	2 U	2.1 U	2.87 U
2.4 U	2 U	2.1 U	3.62 UL	2.39 U	2.18 U	2.43 U	2.3 U	2.07 U	2 U	2.1 U	2.87 U
2.4 U	2 U	2.1 U	3.62 UL	2.39 U	2.18 U	2.43 U	2.3 U	2.07 U	2 U	2.1 U	2.87 U
79 J	97 J	64 J	890 L	471 U	428 U	471 U	446 U	407 U	44 J	412 U	66 J
470 UJ	400 UJ	410 UJ	702 UL	471 U	428 U	471 U	446 U	407 U	388 U	412 U	559 U
470 UJ	400 UJ	410 UJ	702 UL	471 U	428 U	471 U	446 U	87 J	388 U	412 U	559 U
470 UJ	400 UJ	410 UJ	702 UL	62 J	428 U	110 J	446 U	407 U	388 U	412 U	559 U
470 UJ	400 UJ	410 UJ	702 UL	471 U	428 U	160 J	446 U	407 U	388 U	412 U	93 J
50 J	400 UJ	410 UJ	702 UL	471 U	428 U	140 J	446 U	407 U	388 U	412 U	93 J
470 UJ	400 UJ	410 UJ	150 L	72 J	428 U	180 J	446 U	407 U	388 U	412 U	130 J
470 UJ	400 UJ	410 UJ	78 L	109 J	65 J	210 J	446 U	407 U	388 U	412 U	180 J
470 UJ	400 UJ	410 UJ	702 UL	471 U	428 U	130 J	446 U	407 U	388 U	412 U	97 J
470 UJ	400 UJ	410 UJ	702 UL	471 U	428 U	61 J	446 U	407 U	388 U	412 U	107 J
470 UJ	400 UJ	410 UJ	702 UL	107 J	67 J	200 J	446 U	407 U	388 U	412 U	200 J
2 J	3 J	2 J	21.4 UJ	5 B	3 B	14.3 UJ	4 B	12.3 UJ	11.8 U	12.5 UJ	16.9 UJ
14 U	12 U	12 U	21.4 UJ	14.3 UJ	13 UJ	14.3 UJ	13.5 UJ	12.3 UJ	11.8 U	12.5 UJ	16.9 UJ
14 U	12 U	12 U	21.4 UJ	14.3 UJ	13 UJ	14.3 UJ	13.5 UJ	12.3 UJ	11.8 U	12.5 UJ	16.9 UJ
14 U	12 U	12 U	21.4 UJ	14.3 UJ	13 UJ	14.3 UJ	13.5 UJ	12.3 UJ	11.8 U	12.5 UJ	16.9 UJ
11 B	13 B	13 B	17 B	9 B	13 U	8 B	11 B	6 B	2 B	3 B	8 B
14 U	12 U	5 J	21.4 UJ	14.3 UJ	13 U	14.3 UJ	13.5 UJ	12.3 UJ	11.8 U	12.5 UJ	16.9 UJ
NR	2,500 J	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
49 B	66 B	37 B	42 J	270 J	107 B	130 B	64 B	105 B	11.8 U	12.5 UJ	40 B
0.3±0.2	0	0.4±0.2	0.8±0.1 J	7.6±6.5	16±5.8	11.7±4.7	9.1±5.9	5.9±1.6	2.2±0.3	1.2±0.2	0.8±0.1
0	0	0.7±0.2	0.34±0.1 J	5 U	14.3±4.1	8.7±3.3	8±4.5	0.6	1±0.1	0.5±0.1	0.7±0.1
0.14±0.08	0.09±0.04	0.1±0.05	NR	NR	NR	NR	NR	NR	NR	NR	NR
6.15±1.7	43.1±7.89	6.56±1.33	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	2.08±1.12	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.51±0.34	0.65±0.32	0.58±0.27	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	0.57±0.51	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	0.29±0.22	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	0.59±0.37	0.79±0.48	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	0.52±0.45	0.67±0.42	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.89±0.61	0.6±0.38	0.81±0.49	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3.69±1.39	NR	2.12±0.99	NR	NR	NR	NR	NR	NR	NR	NR	NR
1.45±0.46	0.77±0.23	0.81±0.25	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	0.64±0.61	0.56±0.45	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.15±0.09	0.21±0.09	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1.61±0.81	1.22±0.58	2.09±0.92	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	0.83±0.42	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	0.23±0.12	NR	NR	NR	NR	NR	NR	NR	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria <i>Residential</i>	Ecological Screening Criteria	C35-SS-01 9-May-95	C35-SS-02 9-May-95	C35-SS-03 9-May-95	C35-SS-04 9-May-95	C35-SS-05 9-May-95
Inorganics, Total									
Aluminum	mg/kg	17,300	78,000	1	9,480	11,600	7,450	10,400	11,000
Antimony	mg/kg	4.9	31	0.48	0.92 L	R	R	R	R
Arsenic	mg/kg	5.29	0.43	328	2.6 K	2.5 K	2.6 K	3.8 K	2.2 K
Barium	mg/kg	125	5,500	440	34	35.6	26	26.8	35.9
Beryllium	mg/kg	1.42	160	0.02	0.38	0.41	0.43	0.23	0.48
Cadmium	mg/kg	1.4	39	2.5	0.49 U	0.57 K	0.59 K	0.53 U	0.54 U
Calcium	mg/kg	1,980			989 J	528 J	762 J	418 J	767 J
Chromium	mg/kg	68.9	230	0.0075	15.6	14.4	12.6	12	14.8
Cobalt	mg/kg	25.6	1,600	100	4.4	3	2.6	2.7	3.8
Copper	mg/kg	27.5	3,100	15	10.4	5 K	7	5.3 K	10.2
Iron	mg/kg	23,500	23,000	12	11,700	12,200	14,100	11,600	11,600
Lead	mg/kg	117	400	0.01	18.9 J	9.6 J	24.3 J	28.7 J	18.2 J
Manganese	mg/kg	1,140	1,600	330	151 L	74.1 L	87.4 L	46 L	67.2 L
Magnesium	mg/kg	3,920			3,320 J	1,760 J	787 J	796 J	1,630 J
Mercury	mg/kg	0.07	7.8	0.058	0.06 U	0.05 U	0.07	0.09	0.08
Nickel	mg/kg	24.1	1,600	2	23.4 L	14.1 L	7.9 L	6.6 L	10.1 L
Potassium	mg/kg	1,700			430	404	460	456	769
Selenium	mg/kg	0.497	390	1.8	0.34 UJ	0.33 UL	0.36 UL	0.51 L	0.54 L
Silver	mg/kg	0.492	390	0.0000098	0.09 UL	0.08 UL	0.09 UL	0.09 UL	0.1 UL
Sodium	mg/kg	937			35.9 B	56 B	19.8 U	20.1 U	77.4 B
Thallium	mg/kg	0.245	5.5	0.001	0.29 U	0.28 U	0.31 U	0.32 U	0.33 U
Vanadium	mg/kg	59.2	550	5	20.9	19.6	19.6	30.5	21.5
Zinc	mg/kg	242	23,000	10	28.1 L	28.3 L	30.5 L	19.5 L	26.3 L
Phenolics (total recoverable)	mg/kg				6.87 UJ	6.98 UJ	7.32 UJ	8.25 UJ	6.03 UJ
Phosphorus (total)	mg/kg				393 J	292 J	314 J	309 J	344
Pesticides/PCBs									
Aldrin	µg/kg		38	100	0.38 J	1.99 U	2.21 U	0.94 J	2.31 U
alpha-Chlordane	µg/kg		1,800	100	11	0.8 J	1.6 J	2.24 U	4.4
gamma-Chlordane	µg/kg		1,800	100	4.5	0.5 J	2.21 U	2.24 U	3.1
DDD	µg/kg	7.83	2,700	100	9.7 NJ	3.86 U	21 NJ	4.36 U	51
DDE	µg/kg	392	1,900	100	48 NJ	11.6 NJ	60 NJ	96 NJ	56
DDT	µg/kg	143	1,900	100	38 J	7.8 J	47 J	130 J	34
Dieldrin	µg/kg		40	100	4.01 U	3.86 U	1.3 J	9.9	4.48 U
Heptachlor	µg/kg		140		0.37 J	1.99 U	0.17 B	2.24 U	2.31 U
Heptachlor epoxide	µg/kg		70	100	4 P	1.99 U	2.21 U	2.24 U	2.31 U
Lindane (gamma BHC)	µg/kg		490	100	0.24 J	1.99 U	0.15 J	2.24 U	2.31 U
Phthalates									
Bis(2-ethylhexyl)phthalate	µg/kg		46,000		403 U	388 U	428 U	434 U	446 U
Di-n-butyl phthalate	µg/kg		7,800,000		403 U	388 U	428 U	434 U	446 U
Di-n-octyl phthalate	µg/kg		1,564		403 U	388 U	428 U	434 U	446 U
PAHs									
Benzo(a)anthracene	µg/kg	230	870	100	403 U	388 U	428 U	434 U	446 U
Benzo(a)pyrene	µg/kg	440	87	100	403 U	388 U	428 U	434 U	446 U
Benzo(g,h,i)perylene	µg/kg	200		100	403 U	388 U	428 U	434 U	446 U
Chrysene	µg/kg	380	87,000	100	403 U	388 U	428 U	434 U	446 U
Fluoranthene	µg/kg	320	3,100,000	100	403 U	388 U	428 U	434 U	446 U
Indeno(1,2,3-c,d)pyrene	µg/kg	210	870	100	403 U	388 U	428 U	434 U	446 U
Phenanthrene	µg/kg	170		100	403 U	388 U	428 U	434 U	446 U
Pyrene	µg/kg	620	2,300,000	100	403 U	388 U	428 U	434 U	446 U
Aromatics									
Toluene	µg/kg		16,000,000	100	12 U	12 UJ	13 U	13 U	14 UJ
Chlorinated Volatiles									
Tetrachloroethylene	µg/kg		12,000	300	12 U	12 UJ	13 U	13 U	14 UJ
Trichloroethylene	µg/kg		1,600	300	12 U	12 UJ	13 U	13 U	14 UJ
Chloroform	µg/kg		780,000	300	12 U	12 UJ	13 U	13 U	2 J
Methylene Chloride	µg/kg		85,000	300	2 B	9 B	7 B	1 B	3 B
Chloromethane	µg/kg		49,000		12 U	12 UJ	13 U	13 U	14 UJ
Chemical Warfare Related									
n,n-bis(2,4,6-trichlorophenyl)urea	µg/kg				NR	NR	NR	NR	NR
Misc Volatiles & Semivolatiles									
Acetone	µg/kg		7,800,000		12 U	8 JB	13 U	13 U	14 UJ
Radionuclides									
Gross Alpha	pCi/g	9.1			2±0.5	2.9±0.5	1.4±0.3	0.7±0.2	0.6±0.2
Gross Beta	pCi/g	5.8			0.7±0.1 J	0.9±0.1 J	9.5±0.3 J	9.6±0.3 J	0.6±0.1 J
Cesium-137	pCi/g	0.729			NR	NR	NR	NR	NR
Potassium-40	pCi/g	9.36			NR	NR	NR	NR	NR
Thorium-234	pCi/g				NR	NR	NR	NR	NR
Radium-226	pCi/g	1.48			NR	NR	NR	NR	NR
Lead-214	pCi/g	1.54			NR	NR	NR	NR	NR
Bismuth-214	pCi/g	1.48			NR	NR	NR	NR	NR
Lead-210	pCi/g				NR	NR	NR	NR	NR
Thorium-232	pCi/g	1.36			NR	NR	NR	NR	NR
Radium-228	pCi/g	1.36			NR	NR	NR	NR	NR
Actinium-228	pCi/g	1.36			NR	NR	NR	NR	NR
Thorium-228	pCi/g				NR	NR	NR	NR	NR
Radium-224	pCi/g				NR	NR	NR	NR	NR
Lead-212	pCi/g				NR	NR	NR	NR	NR
Bismuth-212	pCi/g				NR	NR	NR	NR	NR
Thallium-208	pCi/g				NR	NR	NR	NR	NR
Bismuth-211	pCi/g				NR	NR	NR	NR	NR
Cadmium-109	pCi/g				NR	NR	NR	NR	NR
Neptunium-237	pCi/g				NR	NR	NR	NR	NR
Zirconium-89	pCi/g				NR	NR	NR	NR	NR

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

Northern Bush River - Surface Soil

GLOSSARY OF VALIDATION DATA QUALIFIERS

(no code) Confirmed detection/identification.

- U Not detected. The associated number indicates approximate sample concentration necessary to be detected.
- J Analyte present. Reported value may not be accurate or precise.
- B Not detected substantially above the level reported in laboratory or field blanks.
- R Unreliable and unusable result. Analyte may or may not be present in the sample. Value not shown in table.
- N Tentative identification and considered present.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- Q No analytical result.
- UJ Not detected. Quantitation limit may be inaccurate or imprecise.
- UL Not detected. Quantitation limit is probably higher.
- NJ Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.
- D The reported value is from a secondary dilution.
- NR Not run or data not available.

NOTES:

Values shown in bold and highlighted exceed Reference Background, Human Health, or Ecological Screening criteria (USEPA Region III, 1997).

Maximum detected reference background for surface soil (ICF Kaiser Engineers, Inc., 1995b).

USEPA Region III Risk-Based Concentration (RBC) for residential soil (April 2002).

Surface Soil Reference Background values are half of the detection limit for Silver and Thallium.

CONSTITUENTS	Units	Reference Background ^a	Human Health Screening Criteria ^b	Ecological Screening Criteria ^c	C7-SO-01	C7-SO-02
			<i>residential</i>		11-Jun-96	11-Jun-96
Inorganics, Total						
Aluminum	mg/kg	17,300	78,000	1	11,900 J	10,200 J
Antimony	mg/kg	4.9	31	0.48	1.5 B	1.7 B
Arsenic	mg/kg	5.29	0.43	328	7.2	1.7
Barium	mg/kg	125	5,500	440	50 K	38.1 K
Beryllium	mg/kg	1.42	160	0.02	0.61 B	0.36 B
Cadmium	mg/kg	1.4	39	2.5	0.11 U	0.1 U
Calcium	mg/kg	1980			355 K	377 K
Chromium	mg/kg	68.9	230	0.0075	17.5 J	12.6 J
Cobalt	mg/kg	25.6	1,600	100	19.6 K	3.3 B
Copper	mg/kg	27.5	3,100	15	7.1	6.3
Iron	mg/kg	23,500	23,000	12	25,500 J	10,200 J
Lead	mg/kg	117	400	0.01	18.2 K	15.2 K
Manganese	mg/kg	1,140	1,600	330	619 K	51.8 K
Magnesium	mg/kg	3920			788 K	937 K
Mercury	mg/kg	0.07	7.8	0.058	0.06 U	0.06 U
Nickel	mg/kg	24.1	1,600	2	8.9 K	6.2 K
Potassium	mg/kg	1,700			447 J	480 J
Selenium	mg/kg	0.497	390	1.8	0.96 B	0.44 UL
Silver	mg/kg	0.492	390	0.0000098	0.27 B	0.17 U
Sodium	mg/kg	937			208 B	43.6 B
Thallium	mg/kg	0.245	5.5	0.001	0.58 K	0.44 U
Vanadium	mg/kg	59.2	550	0.5	34.3 J	21.4 K
Zinc	mg/kg	242	23,000	10	28.3 J	27.1 J
Phenolics (total recoverable)	mg/kg				4.77	2.66 U
Phosphorus (total)	mg/kg				9.76	13.6
Pesticides/PCBs						
DDD	µg/kg	7.83	2,700	100	42	6.8 J
DDE	µg/kg	392	1,900	100	36	15
DDT	µg/kg	143	1,900	100	76	26
PAHs						
Acenaphthene	µg/kg		4,700,000	100	440 UL	410 UJ
Acenaphthylene	µg/kg	70		100	440 UL	410 UJ
Anthracene	µg/kg	70	23,000,000	100	440 UL	410 UJ
Benzo(a)anthracene	µg/kg	230	870	100	440 UL	410 UJ
Benzo(a)pyrene	µg/kg	440	87	100	440 UL	410 UJ
Benzo(b)fluoranthene	µg/kg	350	870	100	440 UL	410 UJ
Benzo(k)fluoranthene	µg/kg	140	8,700	100	440 UL	410 UJ
Benzo(g,h,i)perylene	µg/kg	200		100	440 UL	410 UJ
Carbazole	µg/kg	72.5	32,000		440 UL	410 UJ
Chrysene	µg/kg	380	87,000	100	440 UL	410 UJ
Dibenzofuran	µg/kg	87.5	310,000		440 UL	410 UJ
Dibenzo(a,h)anthracene	µg/kg	160	87	100	440 UL	410 UJ
Fluoranthene	µg/kg	320	3,100,000	100	440 UL	410 UJ
Fluorene	µg/kg	70	3,100,000	100	440 UL	410 UJ
Indeno(1,2,3-c,d)pyrene	µg/kg	210	870	100	440 UL	410 UJ
2-Methylnaphthalene	µg/kg	72.5	1,600,000		440 UL	410 UJ
Naphthalene	µg/kg		1,600,000	100	440 UL	410 UJ
Phenanthrene	µg/kg	170		100	440 UL	410 UJ
Pyrene	µg/kg	620	2,300,000	100	440 UL	410 UJ

Northern Bush River - Subsurface Soil

C7-SO-02	C7-SO-03	C7-SO-08	C7-SO-10	C7-SO-11	C7-SO-12	C7-SO-13
11-Jun-96	12-Jun-96	10-Jun-96	11-Jun-96	12-Jun-96	12-Jun-96	12-Jun-96
10,200 J	8,440	7,430 J	14,700 J	9,440	7,780	6,920
1.7 B	0.56 UL	0.29 UL	1.7 B	0.56 UL	0.57 UL	0.56 UL
1.7	6.6	3.8	2.2	7.4	4.2 K	2.9 K
38.1 K	112	53.6 J	43.3 K	102	35.5	38.6
0.36 B	0.47	0.38	0.54 B	0.75	0.3 B	0.26 B
0.1 U	0.25 B	0.65	0.1 U	0.34 B	0.1 U	0.1 U
377 K	8,360	2,290 K	198 B	13,300	261 B	459 K
12.6 J	33.2	16.9 J	17.4 J	25.7	10.8	8.2
3.3 B	6	3.9 J	5.2 K	7.4	4.2	2.1 B
6.3	198	24.8 J	6	208	7.7 B	6.7 B
10,200 J	12,300	12,000 J	14,100 J	13,000	10,600	7,510
15.2 K	41.9	21.8 J	9.5 K	26.9	14.9	17.1
51.8 K	291	121 L	61 K	986	107	81.6
937 K	5,300	1,080 K	1,530 K	5,190	744 K	485 K
0.06 U	0.05 U	0.25	0.05 U	0.07	0.06 U	0.05 U
6.2 K	50.8	9.2 J	9.2 K	24.8	5.8	3.6
480 J	417	372 J	637 J	654	296	228
0.44 UL	0.58 B	0.58 L	0.43 UL	0.87 K	0.45 U	0.7 B
0.17 U	1.4 B	1.9	0.28 B	1.1 B	0.17 U	0.17 U
43.6 B	114	129 B	87.6 B	314	26.7 U	49.3
0.44 U	1.3 K	0.48 B	0.43 U	2.1 K	0.48 K	0.44 U
21.4 K	25.5	25.1 J	26.2 J	39.9	20.6	15.8
27.1 J	159	64.9 J	30 J	114	24	19.3
2.66 U	2.6 U	2.93 U	2.8 U	3.34	3.1 U	2.87 U
13.6	5.04	18,800	8.79	3.82	2.77	4.28
6.8 J	9.1 J	15 J	4 U	16	36	63
15	33	19	2.9 J	110 J	35	52
26	21 J	7.4	4.2 J	24	15	14
410 UJ	410	420 U	400 UJ	410 U	420 U	410 U
410 UJ	43 J	420 U	400 UJ	410 U	420 U	410 U
410 UJ	1,100	420 U	400 UJ	54 J	420 U	410 U
410 UJ	3,200	47 J	400 UJ	210 J	420 U	410 U
410 UJ	2,500	420 U	400 UJ	200 J	420 U	410 U
410 UJ	2,900 J	48 J	400 UJ	310 J	420 U	410 U
410 UJ	1,700	48 J	400 UJ	200 J	420 U	410 U
410 UJ	2,400	420 U	400 UJ	190 J	420 U	410 U
410 UJ	500	420 U	400 UJ	70 J	420 U	410 U
410 UJ	3,600 J	51 J	400 UJ	320 J	420 U	410 U
410 UJ	350 J	420 U	400 UJ	410 U	420 U	410 U
410 UJ	560	420 U	400 UJ	58 J	420 U	410 U
410 UJ	7,400 J	85 J	400 UJ	530	420 U	410 U
410 UJ	480	420 U	400 UJ	410 U	420 U	410 U
410 UJ	1,500	420 U	400 UJ	180 J	420 U	410 U
410 UJ	150 J	420 U	400 UJ	410 U	420 U	410 U
410 UJ	160 J	420 U	400 UJ	410 U	420 U	410 U
410 UJ	6,000 J	50 J	400 UJ	470	420 U	410 U
410 UJ	6,400 J	80 J	400 UJ	480	420 U	410 U

CONSTITUENTS	Units	Reference Background ^a	Human Health Screening Criteria ^b <i>residential</i>	Ecological Screening Criteria ^c	C7-SO-01 11-Jun-96	C7-SO-02 11-Jun-96
Aromatics						
Toluene	µg/kg		16,000,000	100	2 J	2 J
Chlorinated Volatiles						
Trichloroethylene	µg/kg		1,600	300	2 J	12 U
Methylene Chloride	µg/kg		85,000	300	11 B	11 B
Chemical Warfare Related						
n,n-bis(2,4,6-trichlorophenyl)urea	µg/kg				NR	1,000 UJ
Misc Volatiles & Semivolatiles						
Acetone	µg/kg		7,800,000		84 B	37 B
2-Butanone (MEK)	µg/kg		47,000,000		13 U	12 U
4-Methyl-2-pentanone (MIK)	µg/kg		6,300,000	100,000	13 U	12 U
Styrene	µg/kg		16,000,000	100	13 U	2 J
Radionuclides						
Gross Alpha	pCi/g	9.1			0.3 U	0.3 U
Gross Beta	pCi/g	5.8			0.2 U	0.3 U
Cesium-137	pCi/g	0.0479			0.14±0.04	0.16±0.08
Potassium-40	pCi/g	8.05			7.74±1.84	48.7±7.24
Uranium-238	pCi/g				0.73±0.51	NR
Thorium-234	pCi/g				1.27±0.45	0.72±0.6
Radium-226	pCi/g	1.06			1.29±1.02	NR
Lead-214	pCi/g	1.10			0.61±0.4	0.47±0.36
Bismuth-214	pCi/g	1.06			0.58±0.17	0.98±0.85
Lead-210	pCi/g				0.63±0.49	NR
Thorium-232	pCi/g	1.83			0.96±0.52	NR
Radium-228	pCi/g	1.83			0.61±0.27	NR
Actinium-228	pCi/g	1.83			0.99±0.54	NR
Radium-224	pCi/g				2.29±1.08	2.44±1.33
Lead-212	pCi/g				0.85±0.21	1±0.32
Bismuth-212	pCi/g				1.07±0.43	0.87±0.44
Thallium-208	pCi/g				0.19±0.08	0.28±0.12
Bismuth-211	pCi/g				1.65±0.63	1.31±0.79
Cadmium-109	pCi/g				1.27±0.59	NR
Mercury-203	pCi/g				NR	NR
Neptunium-237	pCi/g				0.36±0.16	NR
Cerium-141	pCi/g				NR	NR
Europium-155	pCi/g				NR	NR
Iodine-129	pCi/g				NR	NR

NOTES:

Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.

C7-SO-02 11-Jun-96	C7-SO-03 12-Jun-96	C7-SO-08 10-Jun-96	C7-SO-10 11-Jun-96	C7-SO-11 12-Jun-96	C7-SO-12 12-Jun-96	C7-SO-13 12-Jun-96
2 J	3 B	13 U	2 J	3 B	11 B	12 U
12 U	12 U	13 U	12 U	12 U	12 U	12 U
11 B	15 B	7 B	13 B	22 B	14 B	19 B
1,000 UJ	1,200 J	NR	NR	1,000 UJ	NR	NR
37 B	12 U	18 B	37 B	12 U	12 U	140
12 U	12 U	3 J	12 U	12 U	14	20
12 U	12 U	13 U	12 U	12 U	4 B	12 U
2 J	12 U	13 U	12 U	12 U	12 U	12 U
0.3 U	0.9±0.3	1±0.3	0.4±0.2	1±0.2	0.5±0.2	0.3 U
0.3 U	0.6±0.2	0.5±0.2	0.2 U	0.5±0.2	0.2 U	0.2 U
0.16±0.08	0.15±0.06	0.07±0.03	NR	0.21±0.06	0.18±0.06	0.08±0.06
48.7±7.24	47.4±8.67	4.16±1.16	48.7±7.14	42.7±6.35	8.39±2.07	6.33±1.49
NR	NR	1.04±0.4	2±0.82	NR	0.94±0.52	0.23±0.19
0.72±0.6	0.77±0.76	0.57±0.31	1.57±0.62	0.76±0.57	1.17±0.44	NR
NR	1.77±1.55	1.13±0.83	NR	NR	1.35±1.17	1.61±1.32
0.47±0.36	0.91±0.38	0.45±0.22	0.65±0.35	0.5±0.35	0.6±0.28	0.54±0.3
0.98±0.85	NR	NR	0.47±0.19	0.24±0.21	0.71±0.19	0.66±0.23
NR	NR	NR	0.59±0.56	NR	0.78±0.58	0.44±0.28
NR	0.91±0.49	0.57±0.31	0.82±0.48	0.66±0.47	0.77±0.47	0.75±0.48
NR	0.71±0.51	0.51±0.32	1.17±0.56	0.88±0.52	0.68±0.42	0.86±0.56
NR	0.93±0.5	0.58±0.32	0.84±0.49	NR	0.79±0.48	0.77±0.5
2.44±1.33	1.97±1.55	2.46±0.97	3.31±1.34	3.41±1.48	2.46±1.16	3.03±1.31
1±0.32	0.98±0.29	0.63±0.19	0.88±0.26	0.84±0.26	0.82±0.2	1±0.31
0.87±0.44	NR	NR	1.03±0.45	1.02±0.58	1.09±0.41	0.51±0.47
0.28±0.12	0.28±0.1	NR	0.59±0.54	0.23±0.11	0.72±0.47	0.27±0.11
1.31±0.79	1.55±0.69	1.39±0.64	1.65±0.84	1.37±0.77	1.8±0.72	1.88±0.87
NR	NR	NR	3.48±1.06	NR	1.27±0.68	1.35±0.55
NR	0.09±0.07	NR	NR	NR	NR	NR
NR	NR	NR	0.97±0.3	NR	0.35±0.19	0.37±0.15
NR	NR	NR	NR	NR	NR	0.1±0.08
NR	NR	NR	NR	NR	NR	0.15±0.06
NR	NR	NR	NR	NR	NR	0.14±0.11

GLOSSARY OF VALIDATION DATA QUALIFIERS

(no code) Confirmed detection/identification.

- U Not detected. The associated number indicates approximate sample concentration necessary to be detected.
- J Analyte present. Reported value may not be accurate or precise.
- B Not detected substantially above the level reported in laboratory or field blanks.
- R Unreliable and unusable result. Analyte may or may not be present in the sample. Value not shown in table.
- N Tentative identification and considered present.
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- Q No analytical result.
- UJ Not detected. Quantitation limit may be inaccurate or imprecise.
- UL Not detected. Quantitation limit is probably higher.
- NJ Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.
- D The reported value is from a secondary dilution.
- NR Not run or data not available.

NOTES:

Values shown in bold and highlighted exceed Reference Background, Human Health, or Ecological Screening criteria USEPA Region III, 1997).

Maximum detected reference background for surface soil (ICF Kaiser Engineers, Inc., 1995b).

USEPA Region III Risk-Based Concentration (RBC) for residential soil (April 2002).

Subsurface Soil Reference Background values are half of the detection limit for Silver and Thallium.

CONSTITUENTS	Units	Reference Background	Human Health Screening Criteria	Ecological Screening Criteria	C7-SL-09	C36-SL-11
			Residential		10-Jun-96	14-Jun-95
Inorganics, Total						
Aluminum	µg/L	10,200	370,000	25	284 K	10,000
Antimony	µg/L	25	150	30	2.3 U	26.3
Arsenic	µg/L	3.2	0.45	874	2 U	4.6 B
Barium	µg/L	179	2,600	10,000	36.3 J	460
Beryllium	µg/L	2.5	730	5.3	0.3 U	1.2
Cadmium	µg/L	2.5	180	0.53	0.4 U	9.3
Calcium	µg/L	83,800			34,500 J	42,000
Chromium	µg/L	14.2	1,100		1.5 B	60.3
Cobalt	µg/L	21.1	7,300	35,000	1.4 J	13 UL
Copper	µg/L	9.7	15,000	6.5	8.6 J	339
Iron	µg/L	26,700	110,000	320	3,510 J	31,700
Lead	µg/L	18	150	3.2	11.7 B	187
Manganese	µg/L	4,810	7,300	14,500	206 J	269
Magnesium	µg/L	229,000			8.32 K	12,900
Mercury	µg/L	0.2	37.0000	0.012	0.1 U	4.6
Nickel	µg/L	23.7	7,300	160	1.6 B	21 UL
Potassium	µg/L	73,400			2,660 J	4,240
Silver	µg/L	2.5	1,800	0.0001	4	0.86 B
Sodium	µg/L	2,010,000			37,700	53,700
Vanadium	µg/L	23.2	2,600	10,000	0.86 J	52.5 L
Zinc	µg/L	78	110,000	30	102 J	1,810
Cyanide	µg/L	10	7,300	5.2	5 UL	43.7
Phosphorus (total)	µg/L				355	7,060 UJ
Pesticides/PCBs						
delta-BHC	µg/L				0.007 B	0.05 U
DDD	µg/L		2.8	0.6	0.1 U	1.86
DDE	µg/L		2	1,050	0.1 U	2.54 J
Phthalates						
Bis(2-ethylhexyl)phthalate	µg/L		48	30	10 U	2 J
Di-n-butyl phthalate	µg/L		37,000	0.3	10 U	6 J
PAHs						
Acenaphthene	µg/L		3,700	520	10 U	56 J
Benzo(k)fluoranthene	µg/L		9.2		10 U	1 J
Dibenzofuran	µg/L		240		10 U	49 J
Fluoranthene	µg/L		15,000	3,980	10 U	1 J
Fluorene	µg/L		2,400	430	10 U	30 J
Naphthalene	µg/L		650	100	10 U	39 J
Phenanthrene	µg/L			6.3	10 U	4 J
Chlorinated Volatiles						
Methylene Chloride	µg/L		41	11,000	4 B	6 B
Misc Volatiles & Semivolatiles						
n-Nitrosodiphenylamine	µg/L		140	5,850	10 U	4 J
Carbon Disulfide	µg/L		10,000	2	10 U	2 B
Radionuclides						
Gross Beta	pCi/L				4±1	NR
NOTES:						
Values shown in bold exceed Reference Background, Human Health, or Ecological Screening criteria.						

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- D The reported value is from a secondary dilution.
- NR Not run or data not available.

NOTES:

Values shown in bold and highlighted exceed Reference Background, Human Health, or Ecological Screening criteria (USEPA Region III, 1997).

Maximum detected reference background for surface water (ICF Kaiser Engineers, Inc., 1995b).

EPA Region III Risk-Based Concentration (RBC) for tap water adjusted upward by a factor of 10 for residential exposures.

Sludge Reference Background values are half of the detection limit for Antimony, Cadmium, Mercury, Selenium, Silver, and Thallium.